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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Vincent Cedric Colnot

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07/26/2006

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EXAMINER

SUN, SCOTT C

ART UNIT

PAPER NUMBER

2182

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/696,651	Applicant(s) COLNOT, VINCENT CEDRIC	
	Examiner Scott Sun	Art Unit 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-25, 27 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-25, 27, 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendments to the claims filed 5/10/2006 has been noted and entered. Previous claim objections and rejections under U.S.C 112 are withdrawn.

Response to Arguments

2. Applicant's arguments filed 5/10/2006 have been fully considered but they are not persuasive. Applicant's arguments are summarized as:
 - a. Prior art of record (*Atsmon*) does not teach the new claim limitation "a secure memory device having ... an on-chip oscillator, circuitry of which is contained within the secure memory device".
3. Regarding argument 'a', examiner notes that applicant argues *Atsmon* teaches the oscillator being located inside the processor unit (21) of figure 2, instead of the secure memory device as claimed by applicant. However, as stated in previous office action, examiner notes that *Atsmon* teaches explicitly that the oscillator is external to the processor (column 13, lines 4-11), contrary to applicant's interpretation. Even if the oscillator is located inside the processor as applicant suggested, figure 2 shows that the processor unit is inside the card. Accordingly, if the oscillator is inside the processor it would imply the oscillator is inside the card (secure memory device).
4. Having responded to each of applicant's arguments, examiner notes that previous grounds of rejection under U.S.C 102 and U.S.C 103 are still applicable. Furthermore, new grounds of rejection are added in response to the amended claims.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-11, 13-25, 27, 28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

7. Claims 1 and 15, as amended, now recite the secure memory device being contained in a smart card. Claims 1-28 are directed to a secure memory device and a smart card respectively. However, the specification and the drawings (figure 1) seem to imply the secure memory device is the smart card. There is no drawing nor detailed description which shows a smart card that contains the secure memory device (claims 1-14). Similarly, the specification does not show a smart card that contains a secure memory device having a rewritable memory and other circuitry (claims 15-28). It is unclear how the secure memory device is different from the smart card, and how the secure memory device is implemented inside a smart card.

8. Claims 2 and 16, the limitation "the smart card characterized by possessing all processing means". Clearly, a smart card only contains the processing means as shown in figure 1 and in the specification, rather than all processing means such as

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those in the host (PC or IVR server as disclosed in the specification). It is unclear how a smart card can contain all processing means, when the host (PC or IVR server) it communicates with clearly contains other processing means.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-11, 13-25, 27, 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. As stated above, applicant appears to make a distinction between a smart card and a secure memory device. However, the specification fails to clearly show such a distinction. If the secure memory device is interpreted as shown in figure 1, then it is unclear what applicant intends to be the smart card. Claim 1 appears to suggest the secure memory device contains all circuitry shown in figure 1. Claim 15 appears to suggest the secure memory device contains the writable memory and the oscillator, while the smart card contains all other circuitry and the oscillator. As such, the distinction between a smart card and a secure memory device is indefinite, and it is unclear what applicant intends to be the metes and bounds of invention.

12. Claims 3-11, 13, 14, 17-25, 27, 28 are rejected because of their dependency on the above claims.

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13. The following rejections are made based on the examiner's best interpretation of the claims in light of the 35 USC 112 rejections above.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. Claims 1, 2, 15, 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Atsmon et al (6,607,136).

16. Regarding claim 15, Atsmon discloses a secure memory device (system shown in figure 1) for use with and contained within a smart card with a modem interface comprising circuitry of:

A rewritable memory (memory unit 22, figure 2; column 12, lines 38-42);

A processing unit or a microprocessor (processing unit 21);

An on-chip oscillator (oscillator circuit or RC circuit; column 13, lines 4-11),

circuitry of which is contained in the secure memory device; examiner notes that

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Atsmon teaches both circuits being external. However, both circuits are external to the processor, not to the card. This is evidenced by the fact that Atsmon teaches the type of oscillator used is limited by the size of the card. Atsmon also teaches that the oscillator would be connected to the OSC1/CLKIN pin of the processor (figure 7).

Accordingly, examiner asserts that the oscillator is on-chip (on the card).

An ISO 7816 interface (column 25, lines 12, 13);

A one-wire modem interface (transducer; column 11, lines 37-39);

Characterized in that both communication interfaces are bidirectional and share the same I/O terminal (input/output unit 35, figure 3; column 11, lines 36-40);

17. Regarding claim 2, Atsmon further discloses a secure memory of device as in claim 1, exchanging data with a host in the form of a modulated signal by means of a card reader reading the smart card (air, column 15, line 7), the smart card characterized by possessing all processing means. Due to the USC 112 rejection previously cited, examiner relies on specification to interpret the claim to mean using a connector without processing means (page 2, line 20-21).

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 3-11, 13, 14, 17-25, 27, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atsmon in view of Saitoh (US Patent # 5,929,414).

20. Regarding claim 3, Atsmon discloses claim 2, but does not disclose explicitly when a reset input that controls activation of ISO interface and modem interface.

However, Saitoh discloses a memory device (figure 1) wherein a ISO interface (contact 55) is active when a reset input is high, and a modem interface (modem 57) is active when the reset input is low (column 5, lines 22-43; lines 59-65). Examiner notes that Saitoh discloses the modem being activated and connected to the CPU when VCC from a contact reader/writer is off. This means that reset input is also low (off) because a contact reader/writer provides a reset ON only when VCC is on.

Teachings of Atsmon and Saitoh are from the same field of IC cards, and specifically of communication interface design of IC cards. Therefore, it would have been obvious for a person of ordinary skill in the art at the time of invention to combine teachings of Atsmon and Saitoh by using the selector circuitry and logic in the IC card system disclosed by Atsmon for the benefit of enabling both contact and contact-less data transfer in one IC card (column 2, lines 35-38).

21. Regarding claim 4, Atsmon and Saitoh combined disclose claim 3, where Saitoh further discloses transmitting a modulated answer to reset to the host when the reset input is pulled down (column 3, lines 65-68; column 4, lines 1-2). Examiner notes that modem (contact-less interface to reader/writer) also conforms to ISO 7816-3, and therefore must communicate with the reader/writer in the same format. This is further

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evidence by Saitoh's teachings of a reader/writer that communicates with either contact or contactless IC cards (column 8, lines 29-40).

22. Regarding claim 5, Atsmon and Saitoh combined disclose claim 4, where Saitoh further discloses transmitting the MAR only once, when the card is inserted into the card reader (column 8, lines 29-51). Examiner notes this operation is also defined by ISO standard 7816.

23. Regarding claim 6, Atsmon and Saitoh combined disclose claim 5, where Saitoh further discloses where the MAR comprises at least three fields, a header, a card number and a random number. Examiner notes these fields are according to ISO standard 7816.

24. Regarding claim 7, Atsmon and Saitoh combined disclose claim 6, where Saitoh further discloses computing a new random number prior to transmit the MAR. Examiner notes this is again a requirement of ISO standard 7816.

25. Regarding claim 8, Atsmon and Saitoh combined disclose claim 3, where Atsmon further discloses transmitting data to and receiving data from a PC by means of a card reader plugged into the microphone input and the speaker output of the PC sound card (figure 1; column 31, lines 29-52).

26. Regarding claim 9, Atsmon and Saitoh combined disclose claim 8, but does not disclose explicitly powered by voltage provided by the microphone input of the sound card. Examiner asserts that it would have been obvious for a person of ordinary skill in the art at the time of invention to provide power to the card using the microphone because it would eliminate need of a power source on the card.

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27. Regarding claim 10, Atsmon and Saitoh combined disclose claim 3, and Atsmon further discloses transmitting data to and receiving data from an IVR server by means of a card reader plugged into the telephone line (column 10, lines 60-65; column 20, lines 1-18).

28. Regarding claim 11, Atsmon and Saitoh combined disclose claim 10, but does not disclose explicitly powered by voltage provided by the telephone line. Examiner asserts that it would have been obvious for a person of ordinary skill in the art at the time of invention to provide power to the card using the telephone line because it would eliminate need of a power source on the card.

29. Regarding claim 13, Atsmon and Saitoh combined disclose claim 12, but does not disclose explicitly powered by a battery cell within the card reader. Examiner asserts that it would have been obvious for a person of ordinary skill in the art at the time of invention to provide power to the card using battery cell within the card reader because it would eliminate need of a power source on the card.

30. Regarding claim 14, Atsmon and Saitoh combined disclose claim 3, where Saitoh further discloses where Vcc is connected to an ISO contact C1, Rst to an ISO contact C2, Clk to an ISO contact C3, Gnd to an ISO contact c5, and I/O to an ISO contact C7. Examiner notes that these connections are all part of the ISO 7816 standard.

31. Claims 17-25, 27, 28 are substantially similar to claim 3-14. The same rejection is applied.

Conclusion

32. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Sun whose telephone number is (571) 272-2675. The examiner can normally be reached on M-F, 10:30am-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim N. Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SS
6/20/2006



KIM HUYNH
SUPERVISORY PATENT EXAMINER

7/23/06